

# Exhibit 4

# Power management restrictions

As described in [Power management](#) (/about/versions/pie/power), the system can impose power restrictions on apps for a number of reasons. The following table outlines the current restrictions. These restrictions do not apply while the device is charging.

In each case, the most restrictive applicable setting is the one that takes effect. For example, if Battery Saver is active and an app is in the Rare bucket, the more stringent App Standby Buckets restrictions on Firebase Cloud Messaging (FCM) are applied.

**Note:** The values in this table are subject to change. These values are given as examples, and improvements to the balance between battery life and timeliness of content updates may cause them to change.

Setting	Jobs *	Alarms	Network †	Firebase Cloud Messaging §
User Restricts Background Activity				
Restrictions enabled:	Never	Never	No restriction	No restriction
Doze				
Doze active:	Deferred to window	Regular alarms: Deferred to window Inexact while-idle alarms: Limited to 1 per 9 minutes Exact while-idle alarms: Limited to 72 per hour	Deferred to window	High priority: No restriction  Normal priority: Deferred to window
App Standby Buckets (by bucket)				
Active:	No restriction	No restriction	No restriction	Prior to Android 13 (API Level 33) No restriction
Working set:	Limited to 10 minutes every 2 hours	Limited to 10 per hour	No restriction	No restriction
Frequent:	Limited to 10 minutes every 8 hours	Limited to 2 per hour	No restriction	High priority: 10/day

Setting	Jobs *	Alarms	Network †	Firestore Cloud Messaging §
Rare:	Limited to 10 minutes every 24 hours	Limited to 1 per hour	Disabled	High priority: 5/day
Restricted:	Once per day	One alarm per day, either an <a href="#">exact alarm</a> (/training/scheduling/alarms#exact) or an <a href="#">inexact alarm</a> (/training/scheduling/alarms#inexact)	Disabled	High priority: 5/day

\* If jobs restrictions are in force, the app is granted a window of ten minutes at the specified interval. At the end of the ten minutes, all jobs are postponed until the next window.

† If network access is restricted, the app is granted a window of 10 minutes to use the network at the specified interval.

§ If high priority FCM messages are capped, all subsequent messages are treated as normal priority. Note that the high priority message limits indicated for App Standby buckets are applicable only on Android 12 (API Level 32) and lower. For current guidelines on high priority messages, refer to [Set and manage message priority](#) (<https://firebase.google.com/docs/cloud-messaging/android/message-priority>).

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